

1. A method of recording on an optical disc recording media, said method comprising the steps of:

transferring stored input information to an encoder;

transferring encoded information to a record circuit;

causing an input buffer to contain less than a threshold amount of said input information; and

when said input buffer contains less than the threshold amount of said input information, pausing said transferring of said encoded information, to stop said record circuit at a first point on said optical disc recording media while maintaining said encoded information.

2. The method of claim 1, wherein said record circuit does not write any run-out blocks while paused.

3. The method of claim 1, further comprising the steps of causing said input buffer to contain at least a second threshold amount of information, and resuming said step of transferring said encoded information to said record circuit, to thereby restart said record circuit while maintaining data succession across said first point on said optical disc recording media.

4. The method of claim 3, wherein said record circuit does not write any

run-in blocks during said resuming.

5. The method of claim 4, wherein said record circuit does not write any run-out blocks during said pausing.

6. The method of claim 3, wherein said threshold amounts are equal.

7. The method of claim 3, wherein said threshold amounts are not equal.

8. The method of claim 1, wherein said encoded information is interleave encoded.

9. The method of claim 8, wherein said encoded information is CIRC encoded.

10. The method of claim 1, wherein said optical disc recording media is a CD-R media.

11. The method of claim 1, wherein said optical disc recording media is a CD-RW media.

12. The method of claim 1, wherein said input information is data.

13. The method of claim 1, wherein said input information is digital audio.

14. A method of recording data on an optical data recording media, comprising:

encoding data to be recorded to produce encoded data;

storing said encoded data in a device;

pausing a recording operation;

during said pausing, maintaining said encoded data in said device; and

after said pausing, using said maintained encoded data to resume said recording operation.

15. The method of claim 14, wherein said device is a memory.

16. The method of claim 15, wherein said memory is a buffer.

17. The method of claim 16, wherein data succession is maintained between an end position where said recording operation is paused and a start position where said recording operation is resumed.

18. The method of claim 17, wherein said optical data recording media is a CD-R disc or a CD-RW disc.

19. The method of claim 18, wherein said pausing does not write a run-out block on said media.
20. The method of claim 19, wherein said resuming does not write a run-in block on said media.
21. The method of claim 20, wherein said encoding step produces CIRC encoded data.
22. The method of claim 21, wherein said encoding step produces CD-ROM encoded data.
23. The method of claim 14, wherein said pausing is performed when an input buffer contains less data than a threshold.
24. The method of claim 23, wherein said resuming is performed after said input buffer contains more data than a threshold.
25. The method of claim 14, further comprising the step of selecting a writing start point for said resuming of said recording operation by taking timing from the end of previously written data.

26. The method of claim 20, further comprising the step of selecting a writing start point for said resuming step by taking timing from data written on said media.

27. The method of claim 24, wherein said resuming step includes the step of taking timing from previously written data.

28. The method of claim 25, wherein said pausing step includes the step of using a pause signal to mask a clock signal to an encoding device.

29. The method of claim 14, wherein said resuming step includes the step of discontinuing said pause signal.

30. The method of claim 26, wherein said pausing step includes the step of using a pause signal to mask a clock signal to an encoding device, and wherein said resuming includes the step of subsequently applying said clock signal to said encoding device.

31. The method of claim 28, wherein said encoded data is maintained in said device by masking a clock signal during said pausing.

32. A circuit for encoding information to be written, said circuit

comprising:

- an input for receiving information to be encoded;
- an encoder, coupled to said input, for encoding information to be written as encoded information;
- a buffer, coupled to said encoder, for storing the encoded information; and
- a controller, coupled to said encoder and said buffer, for pausing said encoder while maintaining the encoded information stored in said buffer.

33. An apparatus for recording on CD-R or CD-RW data recording media, said apparatus comprising:

- an input buffer for receiving and storing data;
- an encoding circuit for receiving data from said input buffer and for storing encoded data in an encoding buffer; and
- a pause circuit for pausing said encoding circuit while maintaining said encoded data in said encoding buffer, said pause circuit being operated in response to a condition of said input buffer.

34. The apparatus of claim 33, further comprising a counter circuit for taking timing from data written on said recording media to resume writing on said recording media.

35. The apparatus of claim 34, further comprising an optical pick-up for

reading the data written on said recording media.

36. The apparatus of claim 35, further comprising means for preventing a buffer under run condition in said input buffer, said pause circuit being an element of said buffer under run condition preventing means.

37. The apparatus of claim 36, wherein said pause circuit is arranged to mask a clock signal to said encoding circuit.

38. An encoding circuit for a CD-R or CD-RW recording apparatus, said encoding circuit comprising:

a memory; and

a CIRC encoder for generating encoded data, said encoded data being stored in said memory; and

wherein said encoding circuit supports a pause condition which maintains the contents of said memory.

39. An encoding circuit for a CD-R or CD-RW recording apparatus, said encoding circuit comprising:

a first memory;

a second memory;

a CD-ROM encoder for generating first encoded data, said first encoded data

being stored in said first memory; and

a CIRC encoder for generating second encoded data, said second encoded data being stored in said second memory; and

wherein said encoding circuit supports a pause condition which pauses said CD-ROM encoder and said CIRC encoder while maintaining the contents of said first and second memories.